

August 30, 2021

Director, Air Enforcement Division  
Office of Civil Enforcement  
U.S. Environmental Protection Agency  
Mail Code 2242-A  
1200 Pennsylvania Ave., N.W.  
William Jefferson Clinton Building  
Room 1119  
Washington, D.C. 20460-0001  
CERTIFIED MAIL NO.: 7019 2970 0001 2379 8434  
RETURN RECEIPT REQUESTED

Associate Director  
Air, Toxics, and Inspections Coordination Branch (6 EN-A)  
U.S. EPA, Region 6  
1201 Elm Street, Suite 500  
Dallas, Texas 75270  
CERTIFIED MAIL NO.: 7019 2970 0001 2379 8427  
RETURN RECEIPT REQUESTED

**RE: Consent Decree, United States vs. Exxon Mobil Corp., Civil Action No. 4:17-cv-3302 (S.D. Tex.), Semi-Annual Reporting Requirements - ExxonMobil Beaumont Polyethylene Plant**

**To Whom It May Concern:**

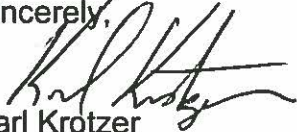
Pursuant to Section X, Paragraphs 66-73 of above referenced Consent Decree, Exxon Mobil Corporation (ExxonMobil) submits this Semi-Annual Report (SAR) covering the period of January 1, 2021 June 30, 2021.

Certification Statement  
Per Consent Decree Paragraph 71:

*I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.*

If you have any questions about this SAR or require any additional information, please contact Tara Bryant at 409-240-4472 or via [beaumont.env.admin@exxonmobil.com](mailto:beaumont.env.admin@exxonmobil.com).

Sincerely,



Karl Krotzer  
Plant Manager  
ExxonMobil Beaumont Polyethylene Plant

Attachment

cc: EES Case Management Unit  
Environment and Natural Resources Division  
U.S. Department of Justice  
P.O. Box 7611  
Washington, D.C. 20044-7611  
**Re: DJ # 90-5-2-1-10128 and 10128/1**  
CERTIFIED MAIL NO.: 7019 2970 0001 2379 8403  
RETURN RECEIPT REQUESTED

United States Attorney  
Southern District of Texas  
Andrew A. Bobb  
Assistant U.S. Attorney  
1000 Louisiana St., Suite 2300  
Houston, TX 77002  
CERTIFIED MAIL NO.: 7019 2970 0001 2379 8410  
RETURN RECEIPT REQUESTED

[parrish.robert@epa.gov](mailto:parrish.robert@epa.gov)  
[foley.patrick@epa.gov](mailto:foley.patrick@epa.gov)  
[osbourne.margaret@epa.gov](mailto:osbourne.margaret@epa.gov)  
[eescdcopy.enrd@usdoj.gov](mailto:eescdcopy.enrd@usdoj.gov) (Re: DJ # 90-5-2-1-10128 and 10128/1)



**Beaumont Polyethylene Plant**

**Beaumont, Texas**

**SEMI-ANNUAL REPORT  
PURSUANT TO CONSENT DECREE,  
*UNITED STATES, ET AL V. EXXON MOBIL CORPORATION  
AND EXXONMOBIL OIL CORPORATION,*  
CIVIL ACTION NO. 4:17-cv-3302 (S.D. TX)**

**January 1, 2021 – June 30, 2021**

**11440 Highway 90**

**Beaumont, Texas**

---

---

## TABLE OF CONTENTS

---

---

<b>Section 1 Status of Consent Decree Section V Compliance Requirements.....</b>	<b>1-1</b>
<b>Section 2 Status of Consent Decree Section V Reporting Requirements.....</b>	<b>2-3</b>
<b>Section 3 Status of Permitting Activity .....</b>	<b>3-4</b>
<b>Section 4 Reports Submitted to LDEQ .....</b>	<b>4-5</b>
<b>Section 5 Status of SEP(s) .....</b>	<b>5-6</b>
<b>Section 6 Updated Waste Gas Minimization Plan (WGMP) .....</b>	<b>6-7</b>
<b>Section 7 Summary of Internal Flaring Incident Reports .....</b>	<b>7-8</b>
<b>Section 8 Reporting Summary .....</b>	<b>8-13</b>
<b>Section 9 Additional Matters .....</b>	<b>9-19</b>
<b>Section 10 Fenceline Air Monitoring Reports .....</b>	<b>10-21</b>
<b>Section 11 Annual Emission Data.....</b>	<b>11-22</b>
<b>Section 12 Any Additional Non-Compliance.....</b>	<b>12-23</b>

---

## SECTION 1 STATUS OF CONSENT DECREE SECTION V COMPLIANCE REQUIREMENTS

---

This progress report provides the status of implementation of Consent Decree requirements that, during the reporting period, require the ExxonMobil Beaumont Polyethylene Plant to undertake a specific action or make a submittal to an agency; or otherwise require the ExxonMobil Beaumont Polyethylene Plant to take specific steps to implement new obligations, including new control or emissions requirements, new monitoring requirements, or institution of new procedures. Once the ExxonMobil Beaumont Polyethylene Plant has reported a requirement as implemented, it will not appear in subsequent progress reports under this subparagraph.

Consent Decree Paragraph 66a. – b.

a. A description of the status of work performed and progress made toward implementing all requirements of Consent Decree Section V (Compliance Requirements) at the Covered Facilities. This topic should describe any major milestones completed and remaining to be completed;

There is no remaining work to be completed by the ExxonMobil Beaumont Polyethylene Plant to meet the requirements of Consent Decree Section V Compliance Requirements, as noted by “None” in Table 1.1.

**TABLE 1.1 Major Milestones Completed For This Reporting Period**

Applicability	Description of Work Completed During This Reporting Period	Completion Date
None	None	None

There is no remaining work to be completed by the ExxonMobil Beaumont Polyethylene Plant to meet the requirements of Consent Decree Section V Compliance Requirements, as noted by “None” in Table 1.2.

**TABLE 1.2 Status of Remaining Work to be Completed**

<b>Applicability</b>	<b>Remaining Work To Be Completed</b>	<b>Anticipated Completion Date</b>
None	None	None

b. A description of any problems encountered or anticipated in meeting the requirements in Consent Decree Section V (Compliance Requirements) at the Covered Facilities, together with implemented or proposed solutions;

**ExxonMobil Beaumont Polyethylene Plant has not encountered nor anticipates problems in meeting the requirements of Consent Decree Section V Compliance Requirements as indicated by “None” in Table 1.3.**

**TABLE 1.3 Encountered or Anticipated Problems In Work To be Completed**

<b>Covered Flare</b>	<b>Encountered or Anticipated Problem(s)</b>	<b>Proposed or Implemented Solution(s)</b>
None	None	None



---

## SECTION 2 STATUS OF CONSENT DECREE SECTION V REPORTING REQUIREMENTS

---

Below is a summary of the status of reports as required under Consent Decree Section V.

### Flare Data and Monitoring Systems and Protocol Report

Requirement: CD Paragraph 18

Description: For each Covered Flare, by no later than 365 Days after the Effective Date, the Defendants must submit a report, consistent with the requirements in Appendix 1.5, to EPA that includes the following:

- a. The information, diagrams, and drawings specified in Paragraphs 1–7 of Appendix 1.5;
- b. A detailed description of each instrument and piece of monitoring equipment, including the specific model and manufacturer, that the Defendants have installed or will install in compliance with Paragraphs 20–24 of this Consent Decree (Paragraphs 8–9 of Appendix 1.5); and
- c. A narrative description of the monitoring methods and calculations that the Defendants will use to comply with the requirements of Paragraph 43 (Paragraph 10 of Appendix 1.5).

**Status: The Flare Data and Monitoring Systems and Protocol Report was submitted on June 6, 2019.**

### Initial Waste Gas Minimization Plan (“Initial WGMP”)

Requirement: CD Paragraph 29

Description: By no later than 365 Days after the Effective Date, for each Covered Flare, the Defendants must submit to EPA an Initial Waste Gas Minimization Plan that discusses and evaluates flaring Prevention Measures on both a facility-wide and Covered Flare-specific basis for each Covered Facility.

**Status: The Initial Waste Gas Minimization Plan was submitted on June 6, 2019.**

### First Updated Waste Gas Minimization Plan (“First Updated WGMP”)

Requirement: CD Paragraph 29

Description: By no later than 730 Days after the Effective Date, the Defendants must submit to EPA a First Updated WGMP that updates, if and as necessary, the information, diagrams, and drawings required in the Flare Data and Monitoring Systems and Protocol Report required by Paragraph 18 and the information required in sub-Paragraphs 29.a–29.e for the 12-month period after the period covered by the Initial Waste Gas Minimization Plan.

**Status: The first Updated Waste Gas Minimization Plan was submitted on June 5, 2020.**

---

## SECTION 3 STATUS OF PERMITTING ACTIVITY

---

Consent Decree Paragraph 66c.

c. A description of the status of any permit applications, including a summary of all permitting activity, pertaining to compliance with this Consent Decree;

**Status:** ExxonMobil Beaumont Polyethylene Plant received an approved alteration from TCEQ's Air Permit Division for existing NSR Permit Number 6860 and Permit Number 8758 on September 18, 2019. The altered NSR permits incorporate the requirements listed in the Consent Decree sub-Paragraph 60.c into Permit Number 6860 and Permit Number 8758 such that the requirements (i) become and remain "applicable requirements" as that term is defined in 40 C.F.R §70.2 and (ii) survive the termination of the Consent Decree.

ExxonMobil Beaumont Polyethylene Plant submitted a permit application to TCEQ's Air Permit Division for Title V Permits 01243 and 02277 dated March 25, 2021. The application requested to incorporate the requirements listed in the Consent Decree sub-Paragraph 60.c into Title V Permits 01243 and 02277. In accordance with Consent Decree sub-Paragraph 60.b., the permit application was submitted no later than three years after the Effective Date or one year after the respective deadline for the Compliance Requirements listed in Paragraph 60.c.



---

## SECTION 4 REPORTS SUBMITTED TO LDEQ

---

Consent Decree Paragraph 66d.

- d. A copy of any reports that were submitted only to LDEQ and that pertain to compliance with this Consent Decree.

**Status: This section does not apply because the ExxonMobil Beaumont Polyethylene Plant is located in the State of Texas and therefore does not submit reports to LDEQ.**

---

---

## SECTION 5 STATUS OF SEP(S)

---

---

Consent Decree Paragraph 66e.

e. A description of the Defendants' progress in satisfying its obligations in connection with the SEP(s) under Section VI including, at a minimum, a narrative description of activities undertaken; status of any construction or compliance measures, including the completion of any milestones set forth in the SEP Work Plan (attached as Appendix 2.1), and a summary of costs incurred since the previous report;

**The Louisiana Beneficial Environmental Projects (BEPs) have been completed. Refer to the 2H2019 Semi-Annual Report submitted by the ExxonMobil Baton Rouge Chemical Plant on February 26, 2020 for supporting information and documentation.**

**The Baytown Area Phyto-Pollution Reduction Supplemental Environmental Project (SEP) has been completed. Refer to the 2H20 Semi-Annual Report submitted by the ExxonMobil Baytown Chemical Plant Semi-Annual Report on February 25, 2021 for supporting information and documentation**

---

## SECTION 6 UPDATED WASTE GAS MINIMIZATION PLAN (WGMP)

---

Consent Decree Paragraph 66f.

f. Any updated WGMP for the Covered Facilities that is required to be submitted by Paragraph 31.

Subsequent Updates to WGMPs (“Subsequently Updated WGMP”)

Requirement: CD Paragraph 31

On an annual basis after submitting the First Updated WGMP until termination of the Decree, the Defendants must submit an updated WGMP for a Covered Facility as part of the Semi-Annual Report required by Section IX (Reporting Requirements) if, at that Covered Facility, the Defendants: a) commence operation of a Newly Installed Covered Flare or permanently remove a Covered Flare from service, b) connect a new Waste Gas stream to a Covered Flare, c) intentionally modify the Baseload Waste Gas Flow Rate to a Covered Flare, d) install additional FGRS, or e) change the design of a Covered Flare. Each update must update, if and as necessary, the information required in sub-Paragraphs 29.a.i - 29.a.iii. Each update must update, if and as necessary, the information required in sub-Paragraphs 30.a and 30.b. To the extent the Defendants propose to extend any schedule set forth in a previous WGMP for any of the Covered Facilities, the Defendants may do so only with good cause, the determination of which is subject to Section XII (Dispute Resolution).

**Status: The Initial Waste Gas Minimization Plan was submitted on June 6, 2019. The first Updated Waste Gas Minimization Plan was submitted on June 5, 2020.**

**ExxonMobil Beaumont Polyethylene Plant has no updates to the First Updated WGMP (submitted on June 5, 2020) to report in this Semi-Annual Report.**

---

## SECTION 7 SUMMARY OF INTERNAL FLARING INCIDENT REPORTS

---

Consent Decree Paragraph 66g.

- g. Any summary of internal flaring incident reports as required by Paragraph 34.

### Submitting Summary of Internal Flaring Incident Reports

Requirement: CD Paragraph 34b.

In each Semi-Annual Report due under Section IX (Reporting Requirements), the Defendants must include a summary of the following items for each Reportable Flaring Incident that occurred during the six-month period that the Semi-Annual Report covers:

- i. Date;
- ii. Duration;
- iii. Amount of VOCs and HAPs emitted;
- iv. Root cause(s);
- v. Corrective action(s) completed;
- vi. Corrective action(s) still outstanding; and
- vii. An analysis of any trends identified by the Defendants in the number of Reportable Flaring Incidents, the root causes, or the types of corrective action(s).

**Status:** In accordance with Paragraph 34a. of the Consent Decree, ExxonMobil Beaumont Polyethylene Plant began monitoring for Reportable Flaring Incidents (RFIs) on June 6, 2019. A summary of RFIs that occurred from January 1 –through June 30, 2021 are provided in Table 7.1.

**TABLE 7.1 January 1 – June 30, 2021 Summary of Internal Flaring Incident Reports**

Date	Duration, Hours	Amount Emitted	
		VOCs	HAPs
1/8/21 2:00 AM – 1/9/21 2:00 AM	24.0	1,904 lbs	8 lbs
<b>Covered Flares(s)</b>	LP Flare		
<b>Root Cause</b>	The root cause of this RFI was the sudden failure of HRU compressor, K-4411, loader.		
<b>Corrective Action(s) Completed</b>	Compressor K-4411 was rebuilt and returned to service.		
<b>Corrective Action(s) Still Outstanding</b>	None		

ExxonMobil  
Consent Decree Semi-Annual Report

Beaumont Polyethylene Plant  
January 1, 2021 – June 30, 2021

Date	Duration, Hours	Amount Emitted	
		VOCs	HAPs
2/15/2021 7:00 AM– 3/8/2021 5:00 AM	526	2,830 lbs	29 lbs
<b>Covered Flares(s)</b>	LP Flare		
<b>Root Cause</b>	The root cause of the flaring is complete facility shutdown due to Winter Storm Uri. As the freeze impacts were beyond the control of BPEP, despite best efforts, this RFI was included in a Force Majeure letter that was submitted to the EPA on 02/26/2021.		
<b>Corrective Action(s) Completed</b>	None – Force Majeure event as described in notification dated 02/26/2021		
<b>Corrective Action(s) Still Outstanding</b>	None		

Date	Duration, Hours	Amount Emitted	
		VOCs	HAPs
2/16/2021 11:00 AM – 3/11/2021 11:00 PM	238	5,082 lbs	100 lbs
<b>Covered Flares(s)</b>	HP Flare		
<b>Root Cause</b>	The root cause of the flaring is complete facility shutdown due to Winter Storm Uri. As the freeze impacts were beyond the control of BPEP despite best efforts, this RFI was included in a Force Majeure letter that was submitted to the EPA on 02/26/2021.		
<b>Corrective Action(s) Completed</b>	None – Force Majeure event as described in notification dated 02/26/2021.		
<b>Corrective Action(s) Still Outstanding</b>	None		

Date	Duration, Hours	Amount Emitted	
		VOCs	HAPs
3/31/2021 2:00 AM – 4/5/2021 11:00 PM	141	1,783 lbs	13 lbs
<b>Covered Flares(s)</b>	LP Flare		
<b>Root Cause</b>	The root causes of this RFI were Reactor 44 catalyst component pump pulsation dampener malfunction and slurry catalyst formulation in Reactor 44 causing sheeting.		
<b>Corrective Action(s) Completed</b>	<p>Repaired the bladder in pulsation dampener associated with Reactor 44 catalyst component pump.</p> <p>Modified slurry catalyst formulation prior to next production of slurry catalyst.</p>		
<b>Corrective Action(s) Still Outstanding</b>	None		

Date	Duration, Hours	Amount Emitted	
		VOCs	HAPs
4/19/2021 11:00 AM – 4/21/2021 9:00 AM	46	3,260 lbs	44 lbs
<b>Covered Flares(s)</b>	LP Flare		
<b>Root Cause</b>	<p>The root cause of the RFI was failed startup of Reactor 60 on 1701 product using catalyst batch 52 (following planned maintenance downtime) due to residual poisons from the open-bed startup.</p> <p>Site followed standard procedures for reactor shutdown and reactor startup which included nitrogen purging designed to remove catalyst poisons and increased flaring.</p>		
<b>Corrective Action(s) Completed</b>	Reviewed and updated Reactor 60's existing open-bed startup procedure's pressure purging steps to better eliminate residual outside materials.		
<b>Corrective Action(s) Still Outstanding</b>	None		

Date	Duration, Hours	Amount Emitted	
		VOCs	HAPs
5/3/2021 10:00 PM - - 5/14/2021 2:00 PM	256	5,582 lbs	43 lbs
<b>Covered Flares(s)</b>	LP Flare		
<b>Root Cause</b>	<p>The root cause of this RFI was increased flaring due to damage to several recovery compressor components on compressor K-4511 on Reactor 45, caused by wear from continuous operation.</p> <p>Additional flaring occurred as a result of a Reactor 44 shutdown on 1802 product using catalyst batch 17, caused by residual poisons in Reactor 44, potentially introduced by reactor feeds, which required shutdown, nitrogen pressure purging, and startup flaring.</p>		
<b>Corrective Action(s) Completed</b>	<p>Repaired K-4511 which included replacing motor, repairing guide block and slide valve, and rechroming compressor cylinder.</p> <p>Developed a long-term maintenance plan for Low Pressure recovery compressors.</p> <p>Reviewed and updated Reactor 44's existing open-bed startup procedure's line flush steps to better eliminate residual outside materials.</p>		
<b>Corrective Action(s) Still Outstanding</b>	None		

Date	Duration, Hours	Amount Emitted	
		VOCs	HAPs
6/7/2021 8:00 PM – 6/8/2021 11:00 PM	27	248 lbs	5 lbs



<b>Covered Flares(s)</b>	HP Flare
<b>Root Cause</b>	The root cause of this RFI was partial packing failure in the 2A3 valve on the hyper compressor K202 cylinder. To prevent additional damage to the cylinder, the flow to the cylinder was diverted to the flare until the unit could be safely shutdown.
<b>Corrective Action(s) Completed</b>	Replaced the 2A3 cylinder on the hyper compressor K202 cylinder
<b>Corrective Action(s) Still Outstanding</b>	None

Paragraph 34.b.vii. of the Consent Decree requires an analysis of any trends identified in the number of Reportable Flaring Incidents, the root causes, or the types of corrective actions(s).

**Status: ExxonMobil Beaumont Polyethylene Plant did not identify trends in the number of RFIs, the root causes, or the types of corrective action(s).**

## SECTION 8 REPORTING SUMMARY

Consent Decree Paragraph 66h.

- h. A summary of the following, per Covered Flare per Calendar Quarter (hours shall be rounded to the nearest tenth):

- (1) The total number of hours of Instrument Downtime claimed pursuant to Paragraph 45, expressed as both an absolute number and a percentage of time the Covered Flare that the instrument/equipment monitors is In Operation and Capable of Receiving Sweep, Supplemental, and/or Waste Gas;

**TABLE 8.1 1<sup>st</sup> Quarter 2021 Instrument Downtime Summary**

Covered Flare	Monitoring System	System Downtime (%)	System Downtime (hours)
HP	Flare Vent Gas Flow Meter	0.9	19.0
HP	Calorimeter	0.6	12.0
HP	Air Assist Flow	0.0	0.0
HP	Camera	0.0	0.3
LP	Flare Vent Gas Flow Meter	3.4	73.0
LP	Calorimeter	3.2	69.0
LP	Air Assist Flow	0.0	0.0
LP	Camera	0.0	0.0

**TABLE 8.2 2<sup>nd</sup> Quarter 2021 Instrument Downtime Summary**

Covered Flare	Monitoring System	System Downtime (%)	System Downtime (hours)
HP	Flare Vent Gas Flow Meter	0.1	2.3
HP	Calorimeter	0.0	0.8
HP	Air Assist Flow	0.0	0.0
HP	Camera	0.0	0.0
LP	Flare Vent Gas Flow Meter	0.4	8.3

LP	Calorimeter	0.4	8.0
LP	Air Assist Flow	0.0	0.0
LP	Camera	0.0	0.0

- (2) If the total number of hours of Instrument Downtime claimed pursuant to Paragraph 45 exceeds 5% of the time in a Calendar Quarter the Covered Flare affected by the downtime is In Operation, an identification of the periods of downtime by date, time, cause (including Malfunction or maintenance), and, if the cause is asserted to be a Malfunction, the corrective action taken;

**Status: No Covered Flare incurred Instrument Downtime claimed pursuant to Paragraph 45 that exceeded 5% of the time the Flare was In Operation in any Calendar Quarter, as noted by “None” in Tables 8.3 – 8.4.**

**TABLE 8.3 1<sup>st</sup> Quarter 2021 Instrument Downtime Identification (if total hours exceeds 5%)**

Covered Flare	Monitoring System	Start Date/Time	End Date/Time	Cause	Corrective Action
HP	None	None	None	None	None
LP	None	None	None	None	None

**TABLE 8.4 2<sup>nd</sup> Quarter 2021 Instrument Downtime Identification (if total hours exceeds 5%)**

Covered Flare	Monitoring System	Start Date/Time	End Date/Time	Cause	Corrective Action
HP	None	None	None	None	None
LP	None	None	None	None	None

- (3) The total number of hours, expressed as both an absolute number of hours and a percentage of time that the Covered Flare was In Operation, in which the requirements of Paragraphs 43-44 were not applicable because the only gas or gases being vented were Pilot Gas or Purge Gas;

**TABLE 8.5 1<sup>st</sup> Quarter 2021 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow**

Covered Flare	Time (%)	Time (Hours)
HP	None	None
LP	None	None

**TABLE 8.6 2<sup>nd</sup> Quarter 2021 Requirements of Paragraphs 43-44 Were Not Applicable Because Only Pilot or Purge Gas Flow**

Covered Flare	Time (%)	Time (Hours)
HP	None	None
LP	None	None

(4) Exceedances of Combustion Efficiency Standards.

- i. The total number of hours, expressed as both an absolute number of hours and a percentage of time the Covered Flare was In Operation, of exceedances of the emissions standards in Paragraphs 43-44; provided however, that if the exceedance of these standards was less than 5% of the time in a Calendar Quarter and was due to one or more of the exceptions set forth in Paragraph 45, the report shall so note; and

**Status:** No exceedance of combustion efficiency standards was due to one or more of the exceptions set forth in Paragraph 45, as noted by “None” in Tables 8.7 – 8.8.

**TABLE 8.7 1<sup>st</sup> Quarter 2021 Exceedance of Paragraph 43-44 Standards**

Covered Flare	Total Exceedance of Emissions Standards		Subset of Exceedances Less Than 5% of the Time in Calendar Quarter and Due to One of the Exceptions Set Forth in Paragraph 45	
	Time (%)	Time (Hours)	Time (%)	Time (Hours)
HP	0.05	1.0	None	None
LP	None	None	None	None

**TABLE 8.8 2<sup>nd</sup> Quarter 2021 Exceedance of Paragraph 43-44 Standards**

Covered Flare	Total Exceedance of Emissions Standards		Subset of Exceedances Less Than 5% of the Time in Calendar Quarter and Due to One of the Exceptions Set Forth in Paragraph 45	
	Time (%)	Time (Hours)	Time (%)	Time (Hours)
HP	0.05	1.0	None	None
LP	None	None	None	None

ii. If the exceedance of the emissions standards in Paragraphs 43-44 was not due to one of the exceptions in Paragraph 45 (Instrument Downtime), or if the exceedance was due to one or more of the exceptions in Paragraph 45 and the total number of hours caused by the exceptions exceeds 5% of the time in a Calendar Quarter that the Covered Flare affected by the Instrument Downtime was In Operation, an identification of each block period that exceeded the standard, by time and date; the cause of the exceedance (including startup, shutdown, maintenance, or Malfunction), and if the cause is asserted to be a Malfunction, an explanation and any corrective actions taken; and

**Status:** Exceedances of combustion efficiency standards, not due to one of the exceptions set forth in Paragraph 45, are provided in Table 8.9 and Table 8.10.

**TABLE 8.9 1<sup>st</sup> Quarter 2021 Exceedance of Combustion Efficiency Standards**

Covered Flare	Combustion Efficiency Standard	Start Date/ Time	End Date/ Time	Cause	Corrective Action
HP	NHVDil	2/16/21 13:45	2/16/21 14:45	During the shutdown of BPEP during Winter Storm Uri, the NHVDil value at the High Pressure Flare fell below 22 BTU/ft <sup>2</sup> for four 15-minute block periods.	Force Majeure event as described in notification dated 02/26/2021. Refer to Section 9 of this Semi-Annual Report for additional details.  The Covered Flares were operated

					during this time following best practices to minimize emissions.
LP	None	None	None	None	None

**TABLE 8.10 2<sup>nd</sup> Quarter 2021 Exceedance of Combustion Efficiency Standards**

<b>Covered Flare</b>	<b>Combustion Efficiency Standard</b>	<b>Start Date/Time</b>	<b>End Date/Time</b>	<b>Cause</b>	<b>Corrective Action</b>
HP	NHVdil	6/03/21 10:00	6/03/21 11:00	Connecting the HP Flare Blower to line power during new substation 700X cutover caused flare controls to move natural gas to minimum while air blower was operating at 100%. The NHVdil was below 22 btu/ft <sup>2</sup> for four 15-minute blocks.	Operations manually increased the supplemental natural gas flow
LP	None	None	None	None	None

- (5) Compliance with Compressor Availability Requirements. Sufficient information to document compliance with the FGRS Compressor availability requirements of sub-Paragraph 38.b. For any period of non-compliance, the Defendants must identify the date, cause, and corrective action taken.

**Requirements Related to Compressors Being Available for Operation**

**Requirement: CD Paragraph 38b.iii.**

**iii. Baytown Chemical Plant FGRS Operation and Availability.**

The Baytown Chemical Plant FGRS must have two Compressors Available for Operation or in operation 100% of the time, three Compressors Available for Operation or in operation 95% of the time, and four Compressors Available for Operation or in operation 90% of the time. The periods provided for in sub-Paragraphs 38.c. and 38.d. below may be included in the amount of time that a Compressor is Available for Operation when

determining compliance with the requirement to have a Compressor Available for Operation or in operation.

**Status: The Consent Decree does not require flare gas recovery for ExxonMobil Beaumont Polyethylene Plant and thus this section does not apply.**



---

## SECTION 9 ADDITIONAL MATTERS

---

Consent Decree Paragraph 66i.

- i. Any additional matters that the Defendants believe should be brought to the attention of EPA, or LDEQ for the ExxonMobil Beaumont Polyethylene facility.

**Status:** Pursuant to Paragraphs 88-89 of the Consent Decree (CD) between the United States and Exxon Mobil Corporation and ExxonMobil Oil Corporation, No. 17-cv-3302 (S.D. Tex.), entered on June 6, 2018, a letter dated February 26, 2021, was submitted to the Environmental Protection Agency providing notice that a Force Majeure event, as defined in CD Paragraph 88, occurred as a result of the Winter Storm Uri. This force majeure event impacted the ability of the BPEP to comply with various provisions of the CD. In the Force Majeure letter dated February 26, 2021, ExxonMobil stated that when the investigation is complete, ExxonMobil will make a subsequent notification providing an update to the original letter. This section of the Semi-Annual Report provides updates to non-compliance issues incurred during the Winter Storm Uri incident under the CD for BPEP.

The CD specifies that a Force Majeure request must comply with the requirements of Paragraph 89 of the CD and must provide an explanation and description of the reasons for the delay; the anticipated duration of the delay; all actions taken or to be taken to prevent or minimize the delay; a schedule for implementing any measures to be taken to prevent or mitigate the delay or the effect of the delay; ExxonMobil's rationale for attributing such delay to a Force Majeure if it intends to assert such a claim; and a statement as to whether, in the opinion of ExxonMobil, such event may cause or contribute to an endangerment to public health, welfare or the environment. These elements were described in the February 26, 2021 letter submitted to EPA, and were organized by the respective impacted CD paragraph, along with a discussion of each element.

### **Impacted CD Requirements**

Impacts noted here may have overlap with state and federal requirements and/or operating permits. Items 1 and 2 below are updates from the initial Force Majeure letter dated February 26, 2021.

#### **1. Reportable Flaring Incidents [CD Paragraph 34]**

During the events associated with Winter Storm Uri, BPEP was required to shut down to maintain safe operations. Flaring is a necessary and important part of the shutdown and subsequent startup of BPEP to ensure safe operations. During flaring associated with the BPEP shutdown and subsequent startup, the RFI threshold was exceeded at

the Low Pressure Flare and at the High Pressure Flare. The Covered Flares were operated during this time following best practices to minimize emissions.

**2. Flare Tip Velocity [CD Paragraph 40]**

ExxonMobil is not aware of any violations of the Consent Decree Flare Tip velocity requirements occurring during start-up of units following the shutdown caused by Winter Storm Uri.

**3. Net Heating Value Standards [CD Paragraph 43]**

During the shutdown of BPEP, the NHVdil value at the High Pressure Flare fell below 22 BTU/ft<sup>2</sup> for four 15-minute block periods due to the loss of instrument air during Winter Storm Uri. The Covered Flares were operated during this time following best practices to minimize emissions. There were no other deviations from Net Heating Value standards due to Winter Storm Uri at BPEP.

**4. Instrument Downtime [CD Paragraph 45]**

Calorimeters and flow meters were impacted as a result of Winter Storm Uri. Instrument downtime occurred as a result of Winter Storm Uri but remained below 5% for the quarter.

**The ExxonMobil Beaumont Polyethylene Plant has reviewed the possible non-compliance issues listed in the Force Majeure Letter sent to EPA dated February 26, 2021. At this time, ExxonMobil has noted that item 3 of the above section is a confirmed non-compliance of the Consent Decree. There were no additional CD non-compliance issues found subsequent to completion of the investigation. Respectfully, ExxonMobil reserves the right to claim these violations pursuant to Paragraphs 88-89 of the Consent Decree (CD) between the United States and Exxon Mobil Corporation and ExxonMobil Oil Corporation, No. 17-cv-3302 (S.D. Tex.), entered on June 6, 2018.**

---

## SECTION 10 FENCELINE AIR MONITORING REPORTS

---

Consent Decree Paragraph 67 a. – b.

The Defendants must submit Fenceline Air Monitoring Reports as part of each Semi-Annual Report. The Fenceline Air Monitoring Reports must contain the following information:

- a. In spreadsheet format, the individual sample results for each monitor comprising each Fenceline Monitoring System, each bi-weekly annual average benzene concentration difference value (once annual averages are available), and the corresponding meteorological data for the relevant monitoring periods. The first two columns of each spreadsheet shall be the date and time for each sample taken; and
- b. A detailed description of the actions and findings of any root cause analysis and corrective action(s) undertaken pursuant to Paragraph 3(g) of Appendix 2.2, including the known results of the corrective action(s) and the anticipated emissions reductions (in TPY per pollutant).

**Status: The Consent Decree does not require Fenceline Monitoring for the ExxonMobil Beaumont Polyethylene Plant, and thus this section does not apply.**

---

## SECTION 11 ANNUAL EMISSION DATA

---

### Consent Decree Paragraph 68

In the Semi Annual Report that is submitted on February 28 of each year, the Defendants must provide, for each Covered Flare, for the prior calendar year, the amount of emissions of the following compounds (in tons per year): VOCs, HAPs, NOx, CO2, methane, and ethane.

**Status:** The amount of emissions for VOCs, HAPs, NOx, CO2, methane, ethane, for the prior calendar year, will be included in the Semi-Annual Report submitted by February 28<sup>th</sup> of each year.

---

## SECTION 12 ANY ADDITIONAL NON-COMPLIANCE

---

### Consent Decree Paragraph 69

Each Semi-Annual Report must also include a description of any non-compliance with the requirements of this Consent Decree not otherwise identified by Paragraph 66 along with an explanation of the violation's likely cause and of the remedial steps taken, or to be taken, to prevent or minimize such violation. If the cause of a violation cannot be fully explained at the time the report is due, the Defendants must so state in the report. In such a case, the Defendants must investigate the cause of the violation and then submit an amendment to the report, including a full explanation of the cause of the violation, within 30 Days of the Day the Defendants become aware of the cause of the violation. Nothing in this Paragraph or the following Paragraph relieves the Defendants of their obligation to provide the notice required by Section XI (Force Majeure).

**TABLE 12.1 Additional Non-Compliance**

<b>Covered Flare</b>	<b>Start Date/ Time</b>	<b>End Date/ Time</b>	<b>Cause</b>	<b>Corrective Action</b>
None	None	None	None	None